

IN THE CLAIMS

Please cancel Claims 22 and 29 without prejudice to or disclaimer of the subject matter thereof.

Please amend the claims without prejudice or disclaimer of the subject matter thereof, as follows:

1-20 (Canceled)

E1
21. (Currently Amended) An isolated *Dirofilaria immitis* protein having an amino acid sequence SEQ ID NO:4 and variants thereof that are at least 95% identical to SEQ ID NO:4 and have cuticlin activity., wherein said *Dirofilaria immitis* protein is encoded by a nucleic acid molecule that hybridizes under conditions comprising (a) hybridizing in a solution comprising 17.53 grams of sodium chloride and 8.82 grams sodium citrate in 0.1 liters of water, pH 7 (2X SSC) in the absence of nucleic acid helix destabilizing agents, at a temperature of 37°C, and (b) washing in a solution comprising 8.765 grams of sodium chloride and 4.41 grams sodium citrate in 0.05 liters of water, pH 7 (1X SSC) in the absence of nucleic acid helix destabilizing agents at a temperature of 64°C, to a nucleic acid sequence selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:5.

22. (Canceled)

23. (Previously Amended) The protein of Claim 21, wherein said protein is encoded by a nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.

24. (Previously Amended) The protein of Claim 21, wherein said protein comprises an amino acid sequence SEQ ID NO:4.

25. (Canceled).

26. (Canceled).

27. (Currently Amended) A composition comprising an excipient and an isolated *Dirofilaria immitis* protein having an amino acid sequence SEQ ID NO:4 and variants thereof that are at least 95% identical to SEQ ID NO:4 and have cuticlin activity, wherein said *Dirofilaria immitis* protein is encoded by a nucleic acid molecule that hybridizes under conditions comprising (a) hybridizing in a solution comprising 17.53 grams of sodium chloride and 8.82 grams sodium citrate in 0.1 liters of water, pH 7 (2X SSC) in the absence of nucleic acid helix destabilizing agents, at a temperature of 37°C, and (b) washing in a solution comprising 8.765 grams of sodium chloride and 4.41 grams sodium citrate in 0.05 liters of water, pH 7 (1X SSC) in the absence of nucleic acid helix destabilizing agents at a temperature of 64°C, to a nucleic acid sequence selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:5.

28. (Previously Added) The composition of Claim 27, wherein said composition further comprises a component selected from the group consisting of an adjuvant and a carrier.

29. (Canceled)

30. (Previously Amended) The composition of Claim 27, wherein said protein is encoded by a nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.

31. (Previously Amended) The composition of Claim 27, wherein said protein comprises an amino acid sequence SEQ ID NO:4.

32-36 (Canceled).